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A

Practitioner's Docket No. 1285

PATENT

Preliminary Classification:
Proposed Class:
Subclass:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Howard G. Page; Mike O'Brien; Jay Cee Straley

For (title): ADVERTISING INSERTION FOR A VIDEO-ON-DEMAND SYSTEM

CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) AND 1.10*
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Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

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- ☐ deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.
37 C.F.R. Section 1.8(a)

37 C.F.R. Section 1.10*

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- ☐ transmitted by facsimile to the Patent and Trademark Office (703) _____.

Date:

2-4-00

Signature

Laura S. Mellblom

Laura S. Mellblom

(type or print name of person certifying)

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1. Type of Application

This transmittal is for an original (nonprovisional) application.

2. Papers Enclosed

A. Required for filing date under 37 C.F.R. 1.53(b) (Regular) or 37 C.F.R. 1.153 (Design) Application

13 Page(s) of Specification

4 Page(s) of Claims

3 Sheet(s) of Drawing(s)--Informal

B. Other Papers Enclosed

3 Page(s) of declaration and power of attorney

1 Page(s) of abstract

3 Page(s) of Assignment and Agreement in an Application for Letters Patent of the United States of America

3. Declaration or Oath

Enclosed

Executed by:

* inventors.

4. Inventorship Statement

The inventorship for all the claims in this application is the same.

5. Language

English

6. Assignment

An assignment of the invention to Sprint Communications Company, L. P. is attached. A separate "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" is also attached.

7. Fee Calculation (37 C.F.R. Section 1.16)

Regular Application

CLAIMS AS FILED					
Claims	Number Filed	Basic Fee Allowance	Number Extra	Rate	Basic Fee 37 CFR 1.16(a) \$690.00
Total Claims (37 CFR 1.16(c))	27	- 20 =	7 x	\$18.00	\$126.00
Independent Claims (37 CFR 1.16(b))	3	- 3 =	0 x	\$78.00	\$0.00
Multiple Dependent Claim(s), if any (37 CFR 1.16(d))			+	\$260.00	\$0.00
Filing Fee Calculation					\$816.00

8. Fee Payment Being Made at This Time

Enclosed

Filing Fee \$816.00

Recording assignment (\$40; 37 C.F.R. Section 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".) \$40.00

Total Fees Enclosed \$856.00

9. Method of Payment of Fees

Charge Account No. 21-0765 in the amount of \$856.00.
A duplicate of this transmittal is attached.

10. Authorization to Charge Additional Fees

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 21-0765.

37 C.F.R. Section 1.16(a), (f) or (g) (filing fees)

37 C.F.R. Section 1.16(b), (c) or (d) (presentation of extra claims)

37 C.F.R. Section 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

37 C.F.R. Section 1.17(a)(1)-(5) (extension fees pursuant to SECTION 1.136(a))

37 C.F.R. Section 1.17 (application processing fees)

11. Instructions as to Overpayment

Credit Account No. 21-0765.

Respectfully submitted,



SIGNATURE OF PRACTITIONER

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Customer No. 021396

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

Be it known that We, Howard Page, Mike O'Brien, and Jay Cee Straley, with
5 residence and citizenship listed below, have invented the inventions described in the
following specification entitled:

ADVERTISING INSERTION FOR A VIDEO-ON-DEMAND SYSTEM

10 Howard G. Page residence: 111 Central Ave, Burlingame CA 94010
 citizenship: United States of America

 Mike O'Brien residence: 44 Oviedo Ct, Pacifica CA 94044
 citizenship: United States of America

15 Jay Cee Straley residence: 859 Orange Ave, San Carlos CA 94070
 citizenship: United States of America

ADVERTISING INSERTION FOR A VIDEO-ON-DEMAND SYSTEM

RELATED APPLICATIONS

Not applicable

5

FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable

MICROFICHE APPENDIX

10

Not applicable

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

15 The invention is related to the field of video systems, and in particular, to a video advertising system that selects and inserts video advertising into the video content of a video-on-demand system.

2. DESCRIPTION OF THE PRIOR ART

20 Video-on-demand systems are currently being designed and implemented. The video-on-demand system offers an individual viewer various selections from a video library for viewing on-demand. Some examples of video content include movies, television shows, documentaries, news, and sports. The video-on-demand system receives a request from the individual viewer to view a particular selection from the video library. In response to the request, the video-on-demand system transfers the selected video content in a video stream to the viewer. Thus, the video-on-demand system allows
25 an individual viewer to select video content from a video library and immediately view the selected video content.

Video advertising that is provided with the video content may be desirable in a video-on-demand system. Advertising lowers the cost of the video service and may expand the available video content selection. The viewer may also desire advertising if it
30 is targeted properly to the individual viewer's interest.

Prior video systems, such as broadcast television, cable television, and satellite television, have limited targeting capability. Typically, these systems provide advertising based on video content and general geographic area. Viewers in the same geographic area viewing the same video content are subjected to the same video advertising. This can be a problem. For example, if neighbors are viewing the same movie, they view the same commercials. If one neighbor has a high school student and does not need another car, they may desire university advertising instead of car commercials. The other neighbor may not have children but need a car, so they may desire car commercials. Unfortunately, there is not an effective way to insert targeted video advertising along with the selected video content in a video-on-demand system.

SUMMARY OF THE INVENTION

The invention solves the above problems with a video advertising insertion system that selects video advertising for an individual target viewer based on their viewer profile and their video content selection. The viewer profile may include viewer identity or class information such as zip code. Advantageously, the system can target advertising to a specific viewer's interests.

The video advertising insertion system is comprised of a processing system, interface, and video advertising. The video advertising insertion system receives a video stream carrying selected video content from a video-on-demand system. The video advertising insertion system selects and inserts video advertising into the video stream. The video advertising insertion system transfers the video stream carrying both the selected video content and the selected video advertising for display to a target viewer.

BRIEF DESCRIPTION OF THE DRAWINGS

The same reference number represents the same element on all drawings.

FIG. 1 is a block diagram that illustrates the configuration and operating environment for a video advertising insertion system in an example of the invention.

FIG. 2 is a block diagram that illustrates the configuration and operating environment of a video advertising insertion system distributed across a video-on-demand system and a target viewer residence in an example of the invention.

FIG. 3 is a logical table that illustrates a data structure within the processing system of a video advertising insertion system in an example of the invention.

DETAILED DESCRIPTION

System Configuration and Operation – FIG. 1

FIG. 1 is a block diagram that illustrates the configuration and operating environment for a video advertising insertion system 110. The video advertising insertion system 110 is comprised of processing system 111, interface 112, and a collection of video advertising 113. The video advertising insertion system 110 receives a video stream 102 carrying selected video content 101 from a video-on-demand system 100. The video advertising insertion system 110 selects and inserts video advertising 113 into the video stream 102 to generate a video stream 103. The video advertising insertion system 110 transfers the video stream 103 carrying the selected video content 101 interspersed with the selected video advertising 113 to a target viewer display 121 for the target viewer 120.

In operation, the video-on-demand system 100 offers the target viewer 120 various selections from the video content 101 for viewing on-demand. The video-on-demand system 100 receives a request from the target viewer 120 to view a particular selection from the video content 101. In response to the request, the video-on-demand system 100 transfers the selected video content 101 in the video stream 102 to the video advertising insertion system 110 for the target viewer 120.

The processing system 111 selects the particular video advertising 113 to insert in the video stream 102 based on the viewer profile for the target viewer 120 and the selected video content 101 requested by the target viewer 120. A viewer profile may include the identity of the target viewer or class information for the target viewer. Some examples of video advertising 113 include television commercials, screens, and icons. Several techniques for transferring the video advertising 113 to the video advertising

insertion system 110 could be used. The interface 112 then inserts the selected video advertising 113 into the video stream 102 to generate the video stream 103. The interface 111 transfers the video stream 103 to the target viewer display 121 for viewing by the target viewer 120.

5 If desired, the video advertising insertion system 110 can be configured with various features. For example, the processing system 111 could disable fast forward or pause capability when the selected video advertising 113 is displayed. The processing system 111 and the interface 112 could also re-display the selected video advertising 113 after rewinding the selected video content 102.

10 Those skilled in the art will appreciate that some conventional components are omitted from FIG. 1 for clarity. In addition, those skilled in the art will appreciate numerous physical implementations for the video advertising insertion system 110, and that such implementations may be distributed across multiple geographically diverse components or integrated into a single component.

15 Distributed System – FIGS. 2-3

FIGS. 2-3 depict a specific example of a video advertising insertion system in accord with the present invention. Those skilled in the art will appreciate numerous variations from this example that do not depart from the scope of the invention. Those skilled in the art will also appreciate that various features described below could be combined with the above-described embodiment to form multiple variations of the invention.

20 FIG. 2 is a block diagram that illustrates the configuration and operating environment of a video advertising insertion system distributed across a video-on-demand system 200 and a target viewer residence 225. The target viewer residence 225 is connected to the video-on-demand system 200 over a transport systems 202 and 204. The video-on-demand system 200 includes video content 201, processing system 211, and video advertising 213. The transport system 202 uses a faster video transfer rate than the transport system 204, so typically, the lower-speed transport system 204 is cheaper to use
30 than the higher-speed transport system 202.

The target viewer residence 225 includes a target viewer device 210, a target viewer 220, and a television 221. The target viewer device 210 includes scheduler 212 and video storage 214. The scheduler 212 is coupled to the transport system 202 and is also coupled to the television 221 by video link 203. The video storage 214 is coupled to the transport system 204 and is also coupled to the scheduler 212 by link 215.

In operation, the video-on-demand system 200 offers the target viewer 220 various selections from the video content 201 for viewing on-demand. The video-on-demand system 200 receives and processes a request from the target viewer 220 to view a particular selection from the video content 201. In response to processing the request, the video-on-demand system 200 transfers the selected video content 201 over the transport system 202 to the scheduler 212.

The processing system 211 responds to the request by selecting particular video advertising 213 to insert based on the identity of the target viewer 220 and the selected video content 201 that is requested by the target viewer 220. The processing system 211 also determines insertion points in the selected video content 201 for the selected video advertising 213. The processing system 211 transfers the insertion points to the scheduler 212 over either the transport system 202, or the transport system 204 through storage 214 and link 215.

The video-on-demand system 200 also transfers the selected video advertising 213 over the transport system 204 to the video storage 214. If desired, the video storage 213 could provide a cache to avoid the transfer of previously transferred video advertising 213 held in the cache. In alternative embodiments, the video-on-demand system 200 could transfer the selected video advertising 213 to the video storage 214 using spare transport capacity in the transport system 202.

The scheduler 212 transfers the selected video content 201 to the television 221 over the link 203. The television 221 displays the selected video content 201 to the target viewer 220. When the scheduler 212 encounters an insertion point for the selected video content 201, the scheduler 212 interrupts the transfer of the selected video content 201 and retrieves the corresponding selected video advertising 213 from the video storage 214 over the link 215. The scheduler then transfers the selected video advertising 213 to the

television 221 over the link 203. The television 221 displays the selected video advertising 213 to the target viewer 220. When display of the selected video advertising 213 is complete, the scheduler 212 resumes transfer of the selected video content 201 until the next insertion point is encountered.

FIG. 3 is a logical table that illustrates a viewer profile data structure 330 within the processing system 211. The processing system 211 enters the viewer profile data structure 330 with profile information for the target viewer (V1, V2 ... VN) and proceeds through the table using the selected video content (C1, C2 ... CN) to yield the selected video advertising (A1, A2 ... AN) and corresponding insertion points (T1, T2 ... TN).

The profile information for the target viewer could be based on the viewer's identity or on the viewer's class. Examples of a class include zip code, children/no children, and various other demographics.

The viewer profile includes information about the target viewer that indicates their interests. For example, a viewer profile could indicate that the target viewer is interested in golf and country music. Video advertising related to golf and country music could be selected for the target viewer. If specific viewer profiles are used to configure the data structure 330, then the video-on-demand system can target selected advertising to each specific viewer's interests. In addition to viewer profiling, the selected video advertising could relate to the selected video content. If the target viewer is viewing a concert, then video advertising for country music could be selected.

The above-described processing systems includes instructions that are stored on storage media. The instructions can be read and executed by a processor. Some examples of instructions are software, program code, and firmware. Some examples of storage media are memory devices, tape, disks, integrated circuits, and servers. The instructions are operational when executed by the processor to direct the processor to operate in accord with the invention. The term "processor" refers to a single processing device or a group of inter-operational processing devices. Some examples of processors are integrated circuits, computers, and logic circuitry. Those skilled in the art are familiar with instructions, processors, and storage media.

Those skilled in the art will appreciate variations of the above-described embodiments that fall within the scope of the invention. As a result, the invention is not limited to the specific examples and illustrations discussed above, but only by the following claims and their equivalents.

5

CLAIMS:

We claim:

1. A method for providing video advertising where a video-on-demand system receives a request from a target viewer for selected video content, and in response, transfers the selected video content in a video stream to the target viewer, the method comprising:

selecting the video advertising based on a viewer profile for the target viewer and
 5 the selected video content requested by the target viewer; and
 inserting the selected video advertising into the video stream that transfers the selected video content to the target viewer.

2. The method of claim 1 further comprising determining insertion points in the selected
 10 video content for the selected video advertising and inserting the selected video advertising at the insertion points.

3. The method of claim 1 further comprising transferring the selected video content to the target viewer over a first transport system and transferring the selected video advertising
 15 to the target viewer over a second transport system, wherein the first transport system uses greater bandwidth for video transfer than the second transport system.

4. The method of claim 1 further comprising transferring the selected video content to the target viewer over a transport system and transferring the selected video advertising to the
 20 target viewer over the transport system using spare capacity in the video stream.

5. The method of claim 1 wherein selecting the selected video advertising based on the viewer profile for the target viewer comprises using an identity of the target viewer.

25 6. The method of claim 1 wherein inserting the selected video advertising comprises using a target viewer device.

7. The method of claim 1 further comprising caching the video advertising using a target viewer device.

8. The method of claim 1 further comprising displaying the selected video content and the selected video advertising to the target viewer.

9. The method of claim 1 further comprising disabling one of a fast forward, pause, and
5 rewind capability when displaying the selected video advertising.

10. The method of claim 1 further comprising re-displaying the selected video advertising after rewinding the selected video content.

10 11. The method of claim 1 further comprising receiving the request from the target viewer for the selected video content, and in response, transferring the selected video content in the video stream to the target viewer.

12. A video advertising insertion system where a video-on-demand system receives a
15 request from a target viewer for selected video content, and in response, transfers the selected video content in a video stream to the target viewer, the video advertising insertion system comprising:

a processing system configured to select video advertising based on a viewer profile of the target viewer and the selected video content requested by the target viewer;

20 and

an interface configured to insert the selected video advertising into the video stream that transfers the selected video content to the target viewer.

13. The video advertising insertion system of claim 12 wherein the processing system is
25 configured to determine insertion points in the selected video content for the selected video advertising and the interface is configured to insert the selected video advertising at the insertion points.

14. The video advertising insertion system of claim 12 further comprising a first
30 transport system configured to transfer the selected video content to the target viewer and

a second transport system configured to transfer the selected video advertising to the target viewer, wherein the first transport system uses greater bandwidth for video transfer than the second transport system.

- 5 15. The video advertising insertion system of claim 12 further comprising a transport system configured to transfer the selected video advertising to the target viewer using spare capacity in the video stream.

- 10 16. The video advertising insertion system of claim 12 comprising a target viewer device that includes the interface.

17. The video advertising insertion system of claim 16 wherein the target viewer device further comprises a storage medium configured to cache the video advertising.

- 15 18. The video advertising insertion system of claim 12 further comprising a display configured to display the selected video content and the selected video advertising to the target viewer.

- 20 19. The video advertising insertion system of claim 12 wherein the processing system is configured to disable one of a fast forward, pause, and rewind capability when the selected video advertising is displayed.

- 25 20. The video advertising insertion system of claim 12 wherein the processing system and the interface are configured to re-display the selected video advertising after rewinding the selected video content.

- 30 21. The video advertising insertion system of claim 12 further comprising the video-on-demand system configured to receive the request from the target viewer for the selected video content, and in response, transfer the selected video content in the video stream to the target viewer.

22. A product comprising a processor-readable storage medium storing processor-executable instructions for performing the following method for providing video advertising where a video-on-demand system receives a request from a target viewer for selected video content, and in response, transfers the selected video content in a video stream to the target viewer, the method comprising:

selecting video advertising based on a viewer profile for the target viewer and the selected video content requested by the target viewer; and

directing an interface to insert the selected video advertising into the video stream that transfers the selected video content to the target viewer.

23. The product of claim 22 wherein the method further comprises determining insertion points in the selected video content for the selected video advertising and directing the interface to insert the selected video advertising at the insertion points.

24. The product of claim 22 wherein the method further comprises disabling one of a fast forward, pause, and rewind capability when the selected video advertising is displayed.

25. The product of claim 22 wherein the method further comprises directing the interface to re-display the selected video advertising after the selected video content is rewound.

26. The product of claim 22 wherein the method further comprises receiving and processing the request from the target viewer for the selected video content.

27. The product of claim 22 wherein selecting the selected video advertising based on the viewer profile for the target viewer comprises using an identity of the target viewer.

ABSTRACT

A video advertising insertion system is comprised of a processing system, interface, and video advertising. The video advertising insertion system receives a video stream carrying selected video content from a video-on-demand system. The video advertising insertion system selects and inserts video advertising into the video stream. The video advertising insertion system transfers the video stream carrying both the selected video content and the selected video advertising for display to a target viewer.

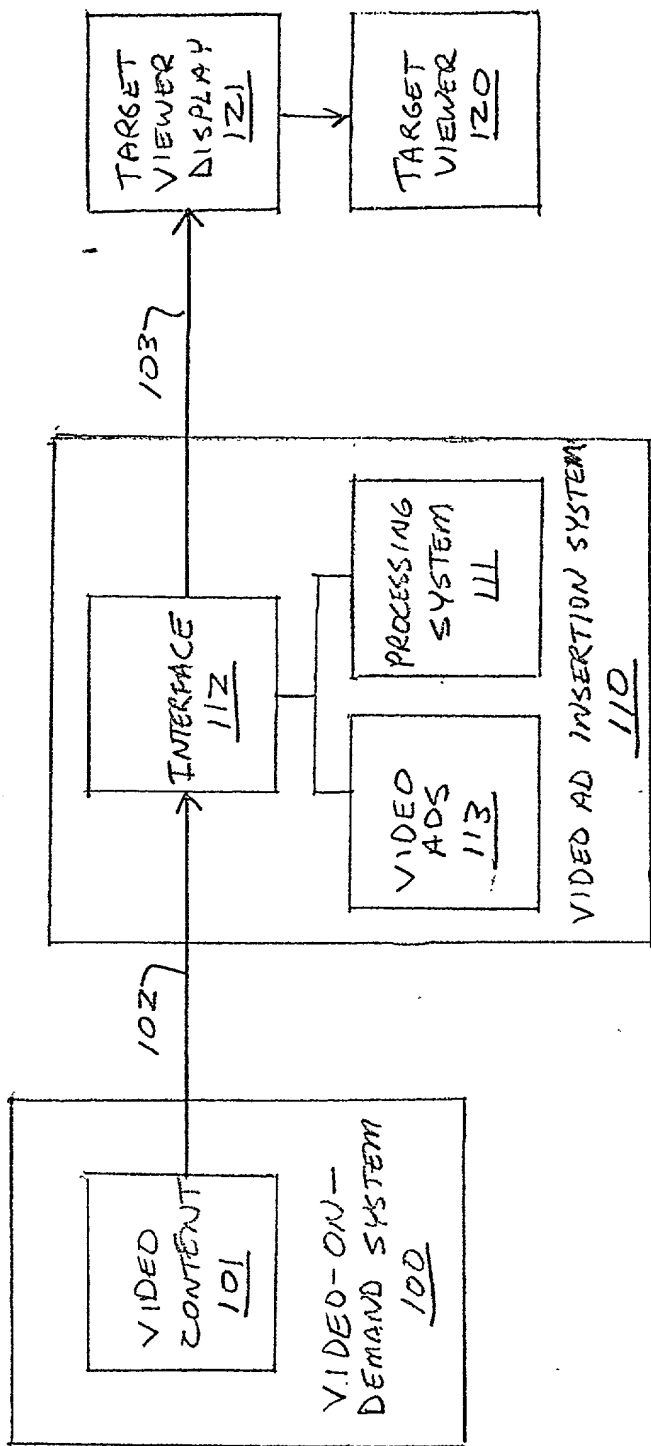


FIG. 1

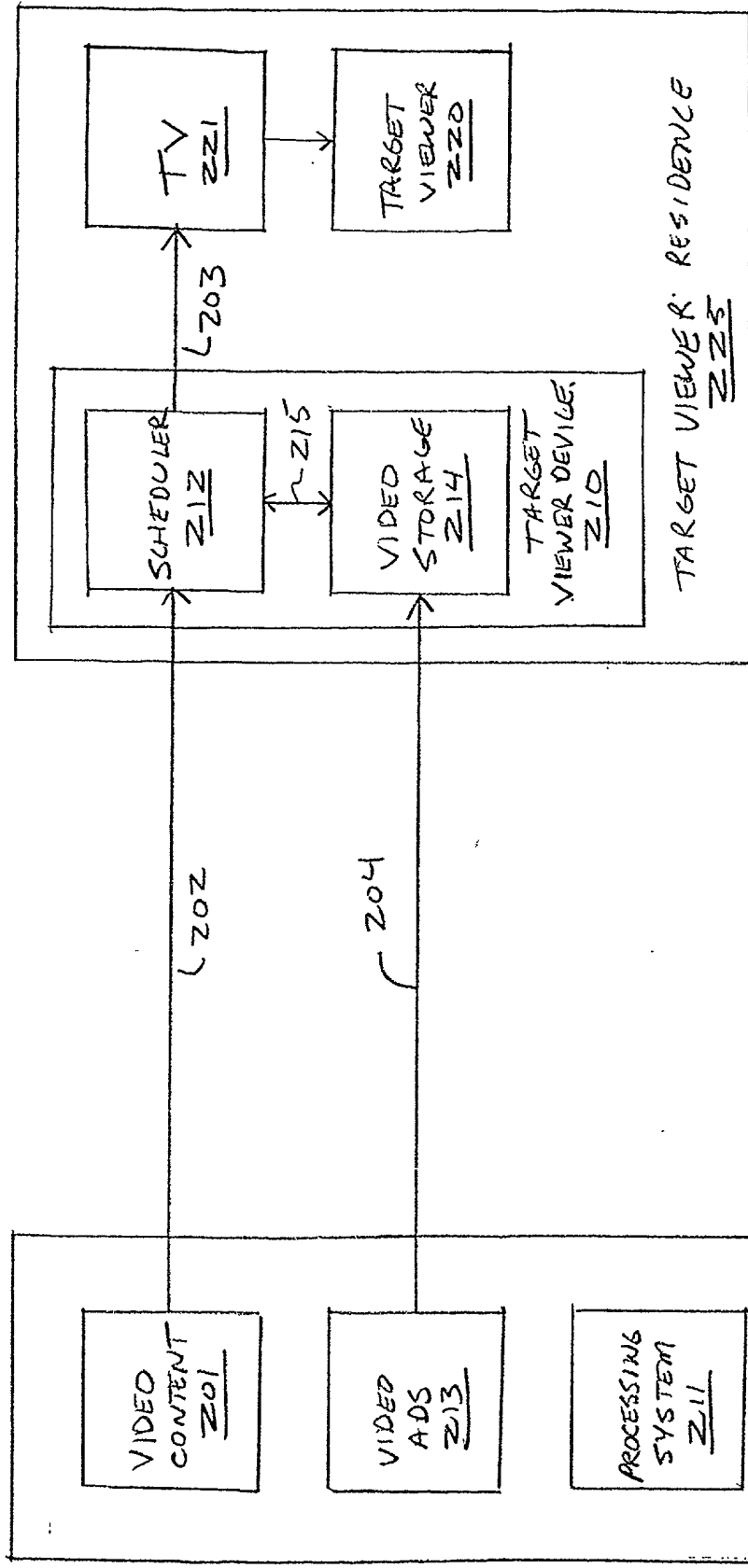


FIG. 2





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330

TARGET VIEWER	VIDEO CONTENT	INSERTION POINT / VIDEO AD
V1	C1	T1/A1 T2/AZ...TN/AN
	C2	T1/A1 T2/AZ...TN/AN
	.	.
	CN	T1/A1 T2/AZ...TN/AN
V2	C1	T1/A1 T2/AZ...TN/AN
	C2	T1/A1 T2/AZ...TN/AN
	.	.
	CN	T1/A1 T2/AZ...TN/AN
.	.	.
VN	C1	T1/A1 T2/AZ...TN/AN
	C2	T1/A1 T2/AZ...TN/AN
	.	.
	CN	T1/A1 T2/AZ...TN/AN

FIG. 3

DECLARATION AND POWERS OF ATTORNEY

As a below named inventor, I hereby declare that my residence, post office address and citizenship is as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "ADVERTISING INSERTION FOR A VIDEO-ON-DEMAND SYSTEM" the specification of which was filed on _____, as Application No. _____ and was amended herewith or, if not identified here by filing date and application number, is attached hereto. I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 CFR 1.56(a). I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate by me or my representatives or assigns for this invention having a filing date before that of the application on which priority is claimed:

Application No. _____ in _____ on _____ priority claimed () Yes () No
Application No. _____ in _____ on _____ priority claimed () Yes () No
Application No. _____ in _____ on _____ priority claimed () Yes () No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)
(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. I hereby appoint, individually and collectively, the following as my/our attorney or agent with full power of substitution and revocation, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Harley R. Ball Registration No. 31,733;
Steven J. Funk Registration No. 35,875;
Michael J. Setter Registration No. 37,936;
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Carl A. Forest; Registration No. 28,494;
James M. Graziano Registration No. 28,300;
Curtis A. Vock Registration No. 38,356;
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Citizenship: United States of America

Date: 04/01/00

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Inventor (3)

(Signature in Full)

Date: 27 Jan 2000

Residence: 859 Orange Avenue, San Carlos, CA 94070

Year	Age	Sex	Height (cm)	Weight (kg)	Body Mass Index (kg/m ²)	Waist Circumference (cm)	Hip Circumference (cm)	Waist-Hip Ratio	Trunk Fat (%)	Visceral Fat (cm ³)	Subcutaneous Fat (cm ³)	Visceral Fat Index (cm ³ /m ²)	Subcutaneous Fat Index (cm ³ /m ²)	Visceral Fat to Subcutaneous Fat Ratio
1990	20	M	170	65	22.0	85	95	0.89	15	100	200	0.05	0.10	0.5
1991	21	F	160	55	21.5	75	85	0.88	12	80	180	0.04	0.09	0.4
1992	22	M	175	70	22.2	90	100	0.90	18	110	220	0.06	0.11	0.6
1993	23	F	165	60	21.8	80	90	0.89	14	90	190	0.05	0.10	0.5
1994	24	M	180	75	22.5	95	105	0.90	20	120	230	0.07	0.12	0.7
1995	25	F	170	65	21.9	85	95	0.89	16	100	200	0.06	0.11	0.6
1996	26	M	185	80	23.0	100	110	0.91	22	130	240	0.08	0.13	0.8
1997	27	F	175	70	22.1	90	100	0.90	18	110	210	0.07	0.12	0.7
1998	28	M	190	85	23.5	105	115	0.91	24	140	250	0.09	0.14	0.9
1999	29	F	180	75	22.3	95	105	0.90	20	120	220	0.08	0.13	0.8
2000	30	M	195	90	23.8	110	120	0.92	26	150	260	0.10	0.15	1.0
2001	31	F	185	80	23.0	100	110	0.91	22	130	230	0.09	0.14	0.9
2002	32	M	200	95	23.8	115	125	0.92	28	160	270	0.11	0.16	1.1
2003	33	F	190	85	23.5	105	115	0.91	24	140	240	0.10	0.15	1.0
2004	34	M	205	100	23.9	120	130	0.93	30	170	280	0.12	0.17	1.2
2005	35	F	195	90	23.2	110	120	0.92	26	150	250	0.11	0.16	1.1
2006	36	M	210	105	23.9	125	135	0.93	32	180	290	0.13	0.18	1.3
2007	37	F	200	95	23.5	115	125	0.92	28	160	260	0.12	0.17	1.2
2008	38	M	215	110	24.0	130	140	0.93	34	190	300	0.14	0.19	1.4
2009	39	F	205	100	23.7	120	130	0.92	30	170	270	0.13	0.18	1.3
2010	40	M	220	115	24.3	135	145	0.93	36	200	310	0.15	0.20	1.5
2011	41	F	210	105	23.8	125	135	0.92	32	180	280	0.14	0.19	1.4
2012	42	M	225	120	24.4	140	150	0.93	38	210	320	0.16	0.21	1.6
2013	43	F	215	110	23.7	130	140	0.92	34	190	290	0.15	0.20	1.5
2014	44	M	230	125	24.5	145	155	0.93	40	220	330	0.17	0.22	1.7
2015	45	F	220	115	23.9	135	145	0.92	36	200	300	0.16	0.21	1.6
2016	46	M	235	130	24.6	150	160	0.94	42	230	340	0.18	0.23	1.8
2017	47	F	225	120	23.8									